

SARCOS RESEARCH CORPORATION 261 EAST 300 SOUTH, SUITE 150 SALT LAKE CITY, UTAH 84111 TELEPHONE: (801) 531-0559 FAX: (801) 531-0315



15 May 1991

Scientific Officer

Office of Naval Research Attn: Dr. Richard Brandt

Ref: Contract N00014-91-C-0071

800 North Quincy Street

Arlington, Virginia 22217-5000

Re: Progress Report No. 1 for Navy SBIR on "STM-based Hydrophone Sensors"

## Accesion for NITS CR4&I DTIC TAB Unabnounced Justification By Distribution | Availability Code: Special

## Report

The following progress report covers the period of 1 March 1991 through 15 May 1991. The following activities are reported:

- Detailed PERT charts have been made up, which identify project tasks and subtasks, the responsible individuals, and their monthly time allocations. Subcontracts have also been prepared.
- Preliminary hydrophone transducer packages have been designed, incorporating tunneling transducer elements. Single-chip, integrated (sensor plus power electronics plus multiplexing) designs are presently under consideration.
- Calculations of membrane deflections and frequency responses versus membrane dimensions, consistent with tunneling sensitivities, are presently underway.
- Electronic interfaces and power requirements are being investigated.
- · Consultant agreements, and tasks, have been initiated.

Sincerely,

DISTRIBUTION STATEMENT A

Approved for purils release
Dismounce Unlimited

Fraser Smith, P.I.

91-00344

91 5 22

101